

What is claimed is:

1. A bandpass limiting apparatus in a receiver of the superheterodyne type, in which a plurality of frequency conversions are performed, said apparatus comprising:

a bandpass changing means for controlling an intermediate-frequency circuit and

5 broadening, narrowing, and/or shifting a passband of an intermediate-frequency signal obtained from a final stage thereof;

an A/D conversion means for converting said intermediate-frequency signal to a digital signal;

10 a digital signal processing means for broadening, narrowing, and/or shifting the passband of said intermediate-frequency signal converted to a digital signal by said A/D conversion means;

a detection means for obtaining an audio signal detected from said digital signal output by said digital signal processing means;

a passband changing means changing a passband based on an adjustment signal from an adjustment operation part; and

15 a control means, which, by controlling said digital signal processing means, based on an adjustment signal from an adjustment operation part, causes said passband of said intermediate-frequency signals at each stage to change in concert.

2. A bandpass limiting apparatus in a receiver of the superheterodyne type, in which a plurality of frequency conversions are performed, said apparatus comprising:

20 a bandpass changing means for controlling an intermediate-frequency circuit and broadening, narrowing, and/or shifting a passband of an intermediate-frequency signal obtained from a final stage thereof;

25 a frequency conversion means for changing said intermediate-frequency signal to a frequency signal for processing that is suitable for a data processing speed of a digital signal processing means;

an A/D conversion means for converting said intermediate-frequency signal to a digital signal;

a digital signal processing means for broadening, narrowing, and/or shifting the passband of said intermediate-frequency signal converted to a digital signal by said A/D conversion means;

a detection means for obtaining an audio signal detected from said digital signal output by said digital signal processing means; and

a control means, which, by controlling said digital signal processing means, based on an adjustment signal from an adjustment operation part, causes said passband of said intermediate-frequency signals at each stage to change in concert.

3. A bandpass-limiting apparatus according to claim 1 or claim 2, wherein said detection means converts a digital signal obtained from said digital signal processing means to a digital signal corresponding to an audio signal after detection, the converted digital signal being then D/A converted.